

REMARKS

Claims 1 through 22 were presented for examination and were pending in this application. In an Office Action dated August 17, 2004, claims 7 through 18 were objected to and claims 1 through 6 and 19 through 22 were rejected. In telephonic exchanges with the Examiner on January 5th and 6th, 2005, Examiner further clarified for Applicants that claims 7 through 18 were objected to, but would be allowable if they were rewritten in independent form. Applicants thank Examiner for this clarification, as well as for examination of the claims pending in this application, and addresses Examiner's comments below.

Applicants herein amend claims 1 and 19, cancel claims 7 through 18, and add claims 23 through 39. These changes are believed not to introduce new matter, and their entry is respectfully requested. The claims have been amended to expedite the prosecution of the application in a manner consistent with the Patent Office Business Goals, 65 Fed. Reg. 54603 (Sept. 8, 2000). In making these amendments, Applicants have not and do not narrow the scope of the protection to which Applicants consider the claimed invention to be entitled and do not concede that the subject matter of such claims was in fact disclosed or taught by the cited prior art. Rather, Applicants reserve the right to pursue such protection at a later point in time and merely seeks to pursue protection for the subject matter presented in this submission.

Based on the above Amendment and the following Remarks, Applicants respectfully request that Examiner reconsider all outstanding objections and rejections, and withdraw them.

Amendments to the Specification

Applicants have amended the specification to correct ministerial errors. Applicants respectfully submit that the amendments to the specification do not add new subject matter.

Response to Rejection of Claims 1 and 2 Under 35 USC 102(b)

in view of Lindemeier

In the 2nd paragraph of the Office Action, Examiner rejects claims 1 and 2 under 35 USC § 102(b) as allegedly being anticipated by U.S. Patent No. 5,335,010 to Lindemeier et al. ("Lindemeier"). This rejection is now traversed.

Claim 1 has been amended to now recite:

A system of detecting radio frequency interference and correcting damaged composite video data signal, comprising:

a detection unit for receiving a composite video signal to detect whether interference causes damage to the received composite video data signal and, for identifying a damaged portion of the received composite video data signal; and

a correction unit, communicatively coupled with the detection unit, for correcting the damaged portion of the composite video data signal in response to identification of the damaged portion of the composite video data signal by replacing the damaged portion of the composite video signal with an equivalent portion of video data corresponding to the damaged portion of the composite video signal.

The claimed invention beneficially recites a system that detects a composite video signal, detects and identifies a damaged portion of the composite video signal, and corrects the damaged portion of the composite video signal by "replacing the damaged portion of the composite video signal with an equivalent portion of video data corresponding to the damaged portion of the composite video signal." Thus, the claimed invention enhances video quality using conventional video sources, which helps reduce system costs.

The cited reference, Lindemeier, does not disclose this claimed invention.

Lindemeier discloses an “antenna diversity receiving system for mobile reception of television signals having N antenna inputs, one diversity processor with as many inputs, and connected downstream in the system to a television receiver, the video signal of the television receiver and the line and picture synchronizing signals being applied to the diversity processor.” *Lindemeier*, Abstract. Lindemeier goes on to disclose that when there is an “imminent picture disturbance the control circuit produces an address signal so that very rapidly a new antenna signal or a linear combination derived from the antenna signals is applied to the television receiver by means of the antenna combiner.” *Id.*

Lindemeier, however, fails to disclose “replacing the damaged portion of the composite video signal with an equivalent portion of video data corresponding to the damaged portion of the composite video signal,” as Applicants’ claim. Rather, Lindemeier discloses that the new signal derived in its system is by testing the signal quality of all available HF signals during the line blanking interval “and the one HF signal having the best signal quality is switched through to the television receiver during the remaining time interval.” *Lindemeier*, Abstract. Specifically, the disclosure in Lindemeier focuses on switching technology to switch between antenna’s that may offer differing signal reception quality rather than replacing damaged portion of a composite video signal as Applicants’ claim. *See Lindemeier*, 8:20-64.

Therefore, for at least the reasons set forth above, Lindemeier does not disclose Applicants’ claimed invention of claim 1. Applicants respectfully submit that this claim is now distinguishable over the cited references. Thus, Applicants request reconsideration of the rejection and allowance of this claim.

As for claim 2, it depends on claim 1 and recites “a transmission end for generating the composite video signal and transmitting the composite video signal to the detection unit.” This additional distinctive feature is not disclosed by Lindemeier because it does not disclose transmission of a composite video signal to a detection unit configured as claimed by Applicants. Thus, Applicants’ respectfully submit that for at least this reason claim 2 is patentably distinguishable over the cited references. Applicants respectfully request reconsideration of the rejection and allowance of this claim.

Response to Rejection Under 35 USC 103(a)

in view of Lindemeier

In the 3rd paragraph of the Office Action, Examiner rejects claims 19 and 20 under 35 USC § 103(a) as allegedly being unpatentable in view of Lindemeier. This rejection is respectfully traversed.

Claim 19 now recites

A method of detecting external interference within a composite video signal representing a line on a video image, comprising the steps of:
receiving the composite video signal;
detecting whether a color burst pulse is damaged in the composite video signal;
generating a detection flag in response to the condition of the color burst in the composite video signal;
replacing, in response to the detection flag, the color burst pulse that is damaged with an equivalent pulse corresponding to the damaged color burst pulse.

The claimed invention comprises a method that beneficially includes replacing, in response to the detection flag, a damaged color burst pulse with an equivalent pulse that corresponds to the damaged one. Thus, the claimed invention provides enhanced picture quality as damaged color burst pulses are not simply dropped or eliminated.

As noted above, Lindemeier does not disclose the claimed invention. Lindemeier's diversity antenna system discloses a process that switches where a video signal is received from in response to video disturbance. *See Lindemeier*, Abstract; 8:20-64. This is in contrast to the claimed invention that replaces a damaged color burst pulse with an equivalent pulse that is not damaged rather than switch from where the video signal is received.

Therefore, for at least the reasons set forth above, Lindemeier does not disclose Applicants' claimed invention of claim 19. Applicants respectfully submit that this claim is now distinguishable over the cited references. Thus, Applicants request reconsideration of the rejection and allowance of this claim.

As for claim 20, it depends on claim 19 and recites "detecting whether a horizontal synchronization pulse is damaged in the composite video signal." Lindemeier does not disclose a horizontal synchronization pulse or detection of it. Thus, Applicants' respectfully submit that for at least this reason claim 20 is patentably distinguishable over the cited references. Applicants respectfully request reconsideration of the rejection and allowance of this claim.

Response to Rejection of Claims 3 Through 6 Under 35 USC 103(a)
in view of Lindemeier and Ireton

In the 4th paragraph of the Office Action, Examiner rejects claims 3 through 6 under 35 USC § 103(a) as allegedly being unpatentable in view of Lindemeier and U.S. Patent No. 5,675,512 to Ireton et al. ("Ireton"). This rejection is respectfully traversed.

Claim 3 depends on claim 2 and claims 4 through 6 depend on claim 3. Claim 3 recites additional distinctive features of the system recited in claims 1 and 2. Specifically, claim 3 also recites "the transmission end comprises: a video sensor for capturing video

image; an encoder, coupled to the video sensor, for converting captured video image into the composite video data signal; and a transmitter, coupled to the encoder, for transmitting composite video data signal to the detection unit.” In addition, claim 4 recites “a microphone for recording audio signal and for transmitting audio signal to the transmitter,” while claim 5 recites the video signal as an NTSC signal and claim 6 recites the video signal as a PAL signal.

As previously noted, the detection unit as claimed by Applicant is not disclosed by Lindemeier. Moreover, Ireton does not remedy the deficiencies of Lindemeier, and hence, does not disclose or suggest the features of claims 3 through 6. In particular, the sparse disclosure of Ireton discloses no more than describe a feature of Intel’s ProShare® products; specifically, it “provides image stretching means that expands the low pixel count image provided by [the ProShare® product] to a pixel count for a full-sized image.” *Ireton*, 2:52-54. There is no disclosure of the detection and correction units as recited in the base claim. There is also no disclosure generating a composite video signal in a manner that would be used by the correction unit as claimed by Applicants.

Further, there appears to no motivation to combine Lindemeier with Ireton. Lindemeier discloses an antenna diversity system with antenna inputs for video signals. *See Lindemeier*, Abstract. In contrast, Ireton contemplates a cable connected communication link 30, such as an ISDN interface to a local carrier or a LAN interface card to a local area network. *Ireton*, 2:38-40. There is no teaching or suggestion of how a system that provides selection between antennas for reception of a video signal would be function with a system that has no antenna and uses a wired connection to receive video signals. At best, the combination provides for a conventional antenna based system to connect with a convention

wired based system to receive video signals, which appears to be no more than a conventional antenna/cable television type configuration. This is not what Applicants claim.

Thus, Applicants' respectfully submit that for at least these reasons claim 3 is patentably distinguishable over the cited references. Therefore, Applicants respectfully request reconsideration of the rejection and allowance of this claim.

Response to Rejection of Claims 21 and 22 Under 35 USC 102(b)

in view of Blair

In the 5th paragraph of the Office Action, Examiner rejects claims 21 and 22 under 35 USC § 102(b) as allegedly being anticipated by U.S. Patent No. 6,005,638 to Blair et al. ("Blair"). This rejection is now traversed.

Claim 21 recites:

A method of correcting corrupted video data which represent a target line on a first video frame to be displayed, comprising the steps of:

storing the corrupted video data representing the first video frame and video data representing a second video frame which is temporally closest to the first video frame, the target line on the first video frame having at least one matching line on the second video frame;

determining whether a portion of the video data representing the matching line on the second frame is corrupted; and

replacing the corrupted video data representing the target line on the first video frame with the video data representing the matching line on the second frame in response to the portion of the video data representing the matching line on the second frame being not corrupted.

Claim 22 discloses additional patentable features of the claimed invention of the claimed invention. The claimed invention of claims 21 and 22 beneficially include storing corrupted video data of a target line, determining if a second line of data is a matching line to the target line, and "replacing the corrupted video data representing the target line on the first

video frame with the video data representing the matching line on the second frame in response to the portion of the video data representing the matching line on the second frame being not corrupted.” Thus, the claimed invention includes enhancing video quality using conventional video sources, which helps reduce system costs.

Blair discloses a system that “enables processing of time-varying video image in a manner that [purposely] blurs (or ‘smears’) the time-varying portions of the video image as successive frames of video data are processed.” *Blair*, Abstract. Blair clearly does not disclose the claimed invention.

Blair addresses transmitting video data at lower frequency rates, e.g., 15 frames per second rather than 24 frames per second, to achieve throughput while still maintaining video quality. *Id.*, 1:52-59, 2:2-11. This video quality is achieved by “processing of a time-varying video image in a manner that blends discontinuities between successive frames of video data (i.e., ‘blurs’ or ‘smears’ the time-varying portion or portions of the video image).” *Id.*, 1:61-65. Thus, Blair does not replace “the corrupted video data representing the target line on the first video frame with the video data representing the matching line on the second frame in response to the portion of the video data representing the matching line on the second frame being not corrupted” as is claimed. Rather, Blair purposely blurs successive lines, which lowers video quality, rather than detecting corrupted lines and replacing them.

Thus, Applicants’ respectfully submit that for at least these reasons claims 21 and 22 are patentably distinguishable over the cited references. Therefore, Applicants respectfully request reconsideration of the rejection and allowance of these claims.

Objected to Claims 7 through 18

Examiner objected to claims 7 through 18. In a telephonic exchange, the Examiner noted that claims 7 through 18 were objected to, but would be allowable if rewritten in independent form. Applicants have added new claims 23 through 34, which correspond to now canceled claims 7 through 18. In addition, Applicants respectfully submit that these claims are supported by the specification and are commensurate within the scope of protection to which Applicants believe they are entitled. Applicants respectfully request consideration and allowance of new claims 23 through 34.

Conclusion

In sum, Applicants respectfully submit that claims 1 through 6 and 19 through 34, as presented herein, are patentably distinguishable over the cited references (including references cited, but not applied). Therefore, Applicants request reconsideration of the basis for the rejections to these claims and request allowance of them.

In addition, Applicants respectfully invite Examiner to contact Applicants' representative at the number provided below if Examiner believes it will help expedite furtherance of this application.

Respectfully Submitted,
Peter A. Thompson and Thomas C. Lyon

Date: January 11, 2005

By:



Rajiv P. Patel, Attorney of Record
Registration No. 39,327
FENWICK & WEST LLP
801 California Street
Mountain View, CA 94041
Phone: (650) 335-7607
Fax: (650) 938-5200